## REMARKS

This responds to the Office Action mailed on May 7, 2008. Claims 19-23 and 26 are amended, no claims are canceled, and no claims are added. Thus, claims 1-26 remain pending in this application.

### *§103 Rejection of the Claims*

Claims 19-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Everett et al. (US 5,317,330) in view of Bohm et al. (US 5,697,069).

Applicant respectfully traverses. The Office has not clearly articulated a reason with a rationale underpinning to combine Everett et al. and Bohm et al..

**Everett et al.** refer to a dual resonant antenna circuit (Title), where the antenna circuit has a parallel resonant circuit and a series resonant circuit (Abstract). The antenna circuit has two resonant frequencies; a parallel resonant at a first frequency (receive) and series resonant at a second frequency (transmit) different from the first (col. 2 lines 5-28; col. 3 line 16). The same circuit uses the same arrangement of components to simultaneously provide transmit and receive operations (col. 2 lines 26-28).

Everett et al. identify FIG. 3 as a first presently preferred embodiment, and FIG. 4 as a second presently preferred embodiment. Everett et al. do not transform the circuit of FIG. 3 to the circuit of FIG. 4, and Everett et al. do not transform the circuit of FIG. 4 to the circuit of FIG. 3. Each of these circuits (FIGS. 3 and 4) is able to both receive and transmit (simultaneously) using an arrangement of components that is not changed to switch from receiving to transmitting or vice-versa.

Everett et al. do not show "a method for switching between a transmit mode and a receive mode" that includes "transforming the antenna element into a high-impedance parallel resonant circuit in a receive mode" and "transforming the antenna element into a low-impedance series resonant circuit in a transmit mode." Since Everett et al. do not switch between transmit and receive modes, Applicant respectfully asserts it is error for the Office to rely on Everett et al. to show "transforming the antenna element into a high-impedance parallel resonant circuit in a receive mode", and "transforming the antenna element into a low-impedance series resonant

circuit in a transmit mode." Further, the arrangement of the elements of the circuit of FIG. 3 does not change. Thus, the circuit of FIG. 3 is not "transformed." Rather, the same circuit has dual resonances, where an arrangement of elements in the circuit resonates at two frequencies (a receive frequency and a transmit frequency). Likewise, the arrangement of the elements of the circuit of FIG. 4 does not change. Thus, the circuit of FIG. 4 is not "transformed."

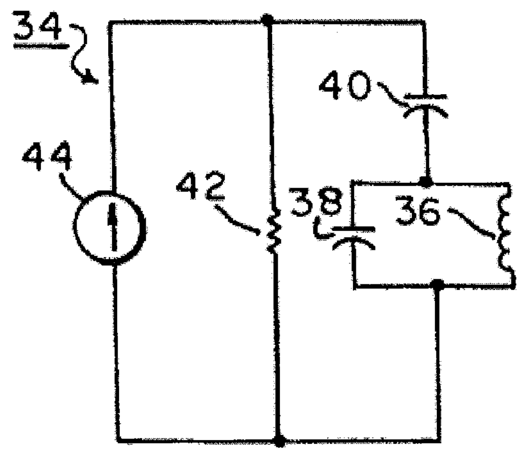



FIG. 3
Everett et al.
5,317,330

The dual frequency antenna circuit of the first embodiment (FIG. 3) includes an arrangement of components (36, 38 and 40) that does not change in order for the circuit to receive or transmit (col. 3 lines 7-19). Using the circuit of FIG. 3, the antenna 36 transmits a signal of coded information at a frequency less than the frequency of the signal which it receives (col. 3 line 17-19).

The Office appears to assert, using Bohn et al., that one would provide a switch in this circuit in order to switch between transmit and receive modes. However, the Office has not shown how one would incorporate such a switch in this circuit when the circuit is designed to transmit and receive simultaneously. Should the Office maintain the rejection, Applicant requests the Office to clearly identify where and how the transmit / receive switch would be incorporated into the circuit of FIG. 3 to allow the circuit to toggle between transmitting and receiving.

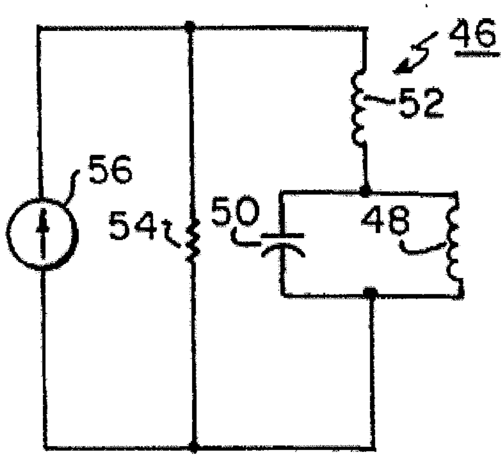
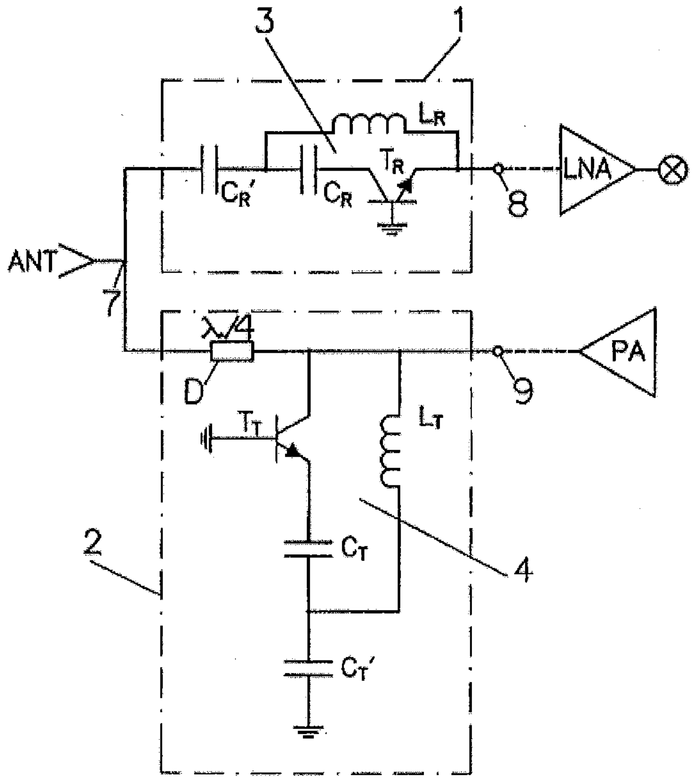



FIG.4
Everett et al.
5,317,330

The dual frequency antenna circuit of the second embodiment (FIG. 4) also includes an arrangement of components (48, 50, 52) that does not change in order for the circuit to receive or transmit (col. 3 lines 20-30). Using the circuit of FIG. 4, the antenna transmits a signal at a higher frequency than the signal received (col. 3 lines 20-23).

The Office appears to assert, using Bohn et al., that one would provide a switch in this circuit in order to switch between transmit and receive modes. However, the Office has not shown how one would incorporate such a switch when the circuit is designed to transmit and receive simultaneously. Should the Office maintain the rejection, Applicant requests the Office to clearly identify where and how the transmit/receive switch would be incorporated into the circuit of FIG. 4 to allow the circuit to toggle between transmitting and receiving.

**Bohm et al.** use separate resonant circuits (a receive diplexer 1 and a transmit diplexer 2) to transmit and receive.




Bohm et al.
5,697,069
Fig. 1

The Office has not clearly articulated a reason with a rationale underpinning to combine **Everett et al.** and **Bohm et al.**. The Office has not established why the switch would be added and how the circuit of Everett et al. would be modified to add the switch. Applicant respectfully asserts there is no motivation to combine the transmit/receive switch of Bohm et al. and the dual resonant antenna circuit of Everett et al. because the dual resonant antenna circuit of Everett et al. can simultaneously perform transmit and receive operations. If Everett et al. can simultaneously transmit and receive, one would not be motivated to add a transmit/receive switch to Everett et al. to switch between transmit and receive modes. Rather the Office makes a broad general citation to the abstract, FIGS. 1 and 2, and col. 1 lines 34 to col. 3 line 67 (which amounts to citing the entire Bohm et al. application except for the background section and the claims).

Applicant has chosen to amend claim 19 to further clarify that the single antenna element has a single resonant circuit, that the single resonant circuit of the antenna element is transformed into a high-impedance parallel resonant circuit in a receive mode, and that the single resonant circuit of the antenna element is transformed into a low-impedance series resonant circuit in a transmit mode.

With respect to **independent claim 19**, Applicant is unable to find, among other things, in the proposed combination of the references, a method for switching between a transmit mode and a receive mode in a wireless communication system having a single antenna element with a single resonant circuit and a DC blocking capacitor connected between an amplifier and a node of the antenna element, as recited in the claim, where the method comprises determining a mode of operation for the communication system, transforming the single resonant circuit of the antenna element into a high-impedance parallel resonant circuit in a receive mode, and transforming the single resonant circuit of the antenna element into a low-impedance series resonant circuit in a transmit mode. Claims 21, 22 and 24-25 depend on claim 19, and are asserted to be in condition for allowance for at least the reasons provided with respect to claim 19.

Additionally, with respect to **claim 25**, Everett et al refer to a dual frequency resonant antenna with two distinct frequencies (where one of the frequencies is higher than the other). Everett et al. do not and cannot have the parallel resonant frequency approximately equal to the series resonant frequency, as recited in the claim, for approximately equal resonant frequencies would destroy the function of the dual frequency resonant antenna. For example, the circuits rely on one resonant circuit having a high impedance while the other resonant circuit has a low impedance for a given frequency (e.g. col. 3 lines 7-16, 40-46). This would not occur if the resonant frequencies were approximately the equal.

Further, **claim 26** recites that the antenna element includes an inductor component and a tuning capacitor component, and that transforming the single resonant circuit of the antenna element into the high-impedance parallel resonant circuit in the receive mode includes connecting the inductor component and the tuning capacitor component in parallel, and that transforming the single resonant circuit of the antenna element into the low-impedance series resonant circuit in the transmit mode includes connecting the inductor component and the tuning

capacitor component in series. Bohm et al. use separate inductors and capacitors to transmit ($L_T$ and $C_T$) and receive ($L_R$ and $C_R$). The dual frequency antenna circuit of the first embodiment of Everett et al. illustrated in FIG. 3 includes an arrangement of components (36, 38 and 40) that does not change in order for the circuit to receive or transmit (col. 3 lines 7-19). The dual frequency antenna circuit of the second embodiment of Everett et al. illustrate in FIG. 4 also includes an arrangement of components (48, 50, 52) that does not change in order for the circuit to receive or transmit (col. 3 lines 20-30).

Withdrawal of the rejection and reconsideration and allowance of the claims are respectfully requested.

*Allowable Subject Matter*

Claims 1-18 have been allowed. Applicant thanks the Examiner for the finding of allowable subject matter.

## CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's representative at (612) 373-6960 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date 8-6-08

By ______________________
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 6 day ofAugust, 2008.

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Name ______________________ Signature ______________________